

Title (en)
Luminescence sensing with ratiometric measurement.

Title (de)
Lumineszenzwahrnehmung mit Verhältnismessung.

Title (fr)
Détection de luminescence avec mesure de rapport.

Publication
EP 0442060 A2 19910821 (EN)

Application
EP 90122891 A 19901129

Priority
US 48099590 A 19900216

Abstract (en)
A sensor for monitoring a condition such as a chemical concentration includes two luminescent materials having differing absorption bands and differing sensitivities to the condition to be monitored. Light in the two absorption bands is applied in alternating sequence so as to elicit emissions from the two luminescent materials in alternating sequence. These emissions are compared to one another and the relationship between them, such as the ratio of their intensities, indicates the condition. The luminescent materials may be porphyrins or derivatives thereof.

IPC 1-7
A61B 5/00; **C09K 11/07**; **G01N 21/64**; **G01N 21/76**

IPC 8 full level
C09K 11/06 (2006.01); **G01N 21/64** (2006.01)

CPC (source: EP US)
C09K 11/06 (2013.01 - EP US); **G01N 21/643** (2013.01 - EP US); **G01N 21/7703** (2013.01 - EP US); **G01N 2021/6441** (2013.01 - EP US); **G01N 2021/6484** (2013.01 - EP US); **G01N 2021/772** (2013.01 - EP US); **G01N 2021/7786** (2013.01 - EP US)

Cited by
DE102013109010B4; DE102011055272A1; EP0536480A3; AU746460B2; US5856515A; US5817830A; EP0529247A3; US5371199A; US5756723A; US5493017A; EP2416164A3; US6514277B1; US6531097B1; WO0077491A3; WO2008027601A3; WO9923476A1; US7775086B2; US8448502B2; US9097738B2; DE102013109010A1; WO2015025243A1; US9976956B2; WO2013068215A1; US9316585B2; DE102011055272B4

Designated contracting state (EPC)
DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0442060 A2 19910821; **EP 0442060 A3 19920624**; JP H04215044 A 19920805; US 5102625 A 19920407

DOCDB simple family (application)
EP 90122891 A 19901129; JP 2238891 A 19910215; US 48099590 A 19900216